REMARKS

The Applicant thanks the Examiner for his careful and thoughtful examination of the present application. By way of summary, Claims 7 and 20 through 38 were pending in this application. In the present amendment, the Applicant has amended the specification, canceled Claims 7 and 20 through 38 without prejudice or disclaimer, and added Claims 39 through 106. Accordingly, Claims 39 through 106 remain pending for consideration.

Objections To Specification

The Applicant has amended the specification to overcome the Examiner's objections thereto. Specifically, the headings have been amended per the Examiner's suggestions. Further, text within the specification has been amended such that it does not appear under various types of bold, italic, underline, lining, font, font size, etc.

The Applicant has added some paragraphs to page 14 of the specification so as to be included at the end of the specification. These paragraphs are from previous pages 20-23, 89, 91, 94, 109, 110, 140, 142, and 151. The Applicant has also moved pages 15 to 165 of the specification to an appendix labeled Appendix 1. A copy of Appendix 1 is included attached hereto and forms a part of the application. The Applicant respectfully submits that no new matter is being introduced by way of this amendment.

Rejection Of Claims 7 and 20 through 38 Under 35 U.S.C. § 112, Second Paragraph

Claims 7 and 20 through 38 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. The Applicant respectfully disagrees. However, Claims 7 and 20 through 38 have been canceled without prejudice or disclaimer, thus mooting this rejection.

The Applicant has added new claims 39 through 106 to clarify what the Applicant regards as the invention. The Applicant respectfully submits that new claims 39 through 106 meet the requirements of 35 U.S.C. § 112, second paragraph.

Rejection Of Claims 20 Through 38 Under 35 U.S.C. § 103(a)

The Office Action rejected Claims 20 through 38 under 35 U.S.C. § 103(a) as being unpatentable over Cowlishaw, "The REXX Language A Practical Approach to Programming" (hereinafter, "Cowlishaw"), and Michel, "Getting Started with Object REXX" (hereinafter, "Michel") in view of Henricson et al., ("Programming in C++ Rules and Recommendations" (hereinafter, "Henricson et al."). Applicant respectfully traverses this rejection, as hereinafter set forth.

M.P.E.P. 706.02(j) sets forth the standard for a Section 103(a) rejection:

> "To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on the Applicant's disclosure." *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Applicant respectfully submits that a *prima facie* case of obviousness is not met because neither Cowlishaw, Michel, nor Henricson disclose or suggest the subject matter claimed herein.

An aspect of the present invention is an object oriented operating system programmed using an object oriented programming language which defines a first class. The object oriented operating system comprises a second class defined by the operating system to replace the first class defined by the object oriented programming language. The second class utilizes different memory management functionality than the first class.

Another aspect of the present invention is an object oriented operating system programmed using an object oriented programming language that includes a string class. The string class included in the object oriented programming language is redefined as a set of string descriptor classes. At least one of the descriptor classes within the set of descriptor classes utilizes different memory management functionality.

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Another aspect of the present invention is a method of allowing objects of the string class to be manipulated or accessed by a program using an object oriented operating system. The program handles all such objects according to one or more of the following requirements: objects of the string class for literal text are handled as belonging to a class in which a pointer points to the memory location where the text string is stored; objects of the string class for length limited text are handled as belonging to a class in which a buffer stores text of a predetermined length requiring a limited subset of available memory management functions; and objects of the string class using heap memory are handled as belonging to a class requiring the full set of available memory management functions.

Cowlishaw teaches using a programming language called REXX. See Cowlishaw, page 1. According to the Examiner, "[f]or manipulating strings, the REXX model consists of three distinct functions." Page 5 of the current Office Action. Michel teaches using a programming language called Object REXX which, according to the Examiner, "extends REXX into object-oriented matter." *Id.* Henricson et al. teach techniques for programming in C++, another programming language. According to the Examiner, rules and recommendations provided by Henricson et al. include "classes/objects." *Id.*

However, Cowlishaw, Michel, and Henricson are each silent on an object oriented operating system programmed using an object oriented programming language, as claimed herein. Specifically, Cowlishaw, Michel, and Henricson, either individually or when combined, do not teach or suggest replacing a class defined by an object oriented programming language when programming an object oriented operating system using the object oriented programming language.

Therefore, the Applicant respectfully submits that new Claims 39 through 106, as presented herein, are patentable over the cited references under 35 U.S.C. § 103.

Request For Telephone Interview

In view of the forgoing, the present application is believed to be in condition for allowance, and such allowance is respectfully requested. If further issues remain to be resolved, the Applicant's undersigned attorney of record hereby formally requests a telephone interview with the Examiner. The Applicant's attorney can be reached at the number listed below.
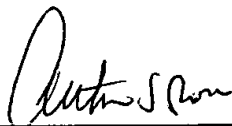
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In addition, please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: 1/15/04

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